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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/684,012	10/10/2003	Brian T. Lewis	42P16119	3236	
8791 7590 02/26/2007 BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD SEVENTH FLOOR LOS ANGELES, CA 90025-1030			EXAMINER		
			THAI, TUAN V		
			ART UNIT	PAPER NUMBER	
	,		2186		
•			1)		
			MAIL DATE	DELIVERY MODE	
			02/26/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

Notice of Allowability	
- SUPPLEMENTAL	_

Application No.	Applicant(s)	
10/684,012	LEWIS, BRIAN T.	
Examiner	Art Unit .	
Tuan V. Thai	2186	

Notice of Allowability	Examiner	Art Unit	
- SUPPLEMENTAL -	Tuan V. Thai	2186	
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	olication. If not include will be mailed in due	ed course. <b>THIS</b>
1. X This communication is responsive to amendment filed 11/1	4/2006 and Examiner Interview con-	<u>ducted 02/05/2007</u> .	
2. X The allowed claim(s) is/are 1-3, 6-21, 24-36, 45, 47-49 and	51-52 renumberd as 1-33, 35-36, 3	4 and 37-38 respectiv	<u>ely</u> .
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority un</li> <li>a) All</li> <li>b) Some*</li> <li>c) None</li> <li>of the:</li> <li>1.  Certified copies of the priority documents have</li> </ul>	·	• .	
2. Certified copies of the priority documents have	been received in Application No		
3. Copies of the certified copies of the priority doc	cuments have been received in this r	national stage applica	tion from the
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	of this communication to file a reply of ENT of this application.	complying with the rec	quirements
<ol> <li>A SUBSTITUTE OATH OR DECLARATION must be submi INFORMAL PATENT APPLICATION (PTO-152) which give</li> </ol>	tted. Note the attached EXAMINER's reason(s) why the oath or declarate	S AMENDMENT or N tion is deficient:	OTICE OF
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	t be submitted.		
(a) I including changes required by the Notice of Draftsperso		948) attached	
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date		•	
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date		ffice action of	
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the	84(c)) should be written on the drawin ne header according to 37 CFR 1.121(c	gs in the front (not the l).	back) of
<ol> <li>DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT F</li> </ol>	sit of BIOLOGICAL MATERIAL m FOR THE DEPOSIT OF BIOLOGICA	nust be submitted. N AL MATERIAL.	lote the
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Attachment(s)			
1. ☐ Notice of References Cited (PTO-892)	<ol><li>5. Notice of Informal Pa</li></ol>	atent Application	
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	<ol> <li>Interview Summary € Paper No./Mail Date</li> </ol>		
Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date	7. 🛛 Examiner's Amendm		
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛛 Examiner's Stateme	nt of Reasons for Allo	wance /
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U.S. Patent and Trademark Office PTOL-37 (Rev. 08-06)

**Notice of Allowability** 

Part of Paper No./Mail Date 20070205

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Art Unit: 2186

Attorney's Docket No.: 42P16119

### IN THE UNITED STATES PATENT AND

#### TRADEMARK OFFICE

In re application of: Lewis, Brian T. Group: 2186

Serial No.: 10/684,012 Examiner: Tuan Thai

For: METHOD AND APPARATUS FOR FEEDBACK-BASED MANAGEMENT OF COMBINED HEAP AND COMPILED CODE CACHES.

1. This action is responsive to amendment filed November 14, 2006 and Examiner interview conducted on February 05, 2007. Claims 4-5, 22-23, 37-44, 46 and 50 have been canceled. Claims 1-3, 6-21, 24-36, 45, 47-49 and 51-52 are now allowed.

#### EXAMINER'S AMENDMENT

- 2. An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the Issue Fee.
- 3. Authorization for this Examiner's Amendment was given in a telephone interview with Ms. Shireen Irani Bacon; Reg. No. 40,494 on February 05, 2007.

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4. The application has been amended as follows:

# a. <u>In the claims</u>:

- al. Cancel claims 4-5, 22-23, 46 and 50.
- a2. Amending the following claims 1, 19, 45 and 49:

### Claim 1. (Once amended) A method comprising:

making a first determination, based on first feedback generated during execution of a program, the first determination to indicate whether [the] <u>a</u> size of a compiled code cache should be modified;

making a second determination, based on second feedback generated during execution of the program, the second determination to indicate whether [the] a size of a heap should be modified; and

modifying a shared storage region based on the first determination and the second determination[.];

wherein modifying the shared storage region based on the first and second determinations further comprises if the second determination indicates that the size of the heap should be increased, modifying allocation of the shared storage region to increase the size of the heap, and to decrease the size of the compiled code cache.

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# Claim 19. (Once amended) An article comprising:

a machine-readable storage medium having a plurality of machine accessible instructions, which if executed by a machine, cause the machine to perform operations comprising:

making a first determination, based on first feedback generated during execution of a program, the first determination to indicate whether [the] <u>a</u> size of a compiled code cache should be modified;

making a second determination, based on second feedback generated during execution of the program, the second determination to indicate whether [the]  $\underline{a}$  size of a heap should be modified; and

wherein the instructions that cause the machine

to modify a shared storage region based on the first

determination and the second determination further comprise

instructions that cause the machine to modify allocation of the

shared storage region to increase the size of the heap and to

decrease the size of the compiled code cache if the second

determination indicates that the size of the heap should be

increased.

# Claim 45. (Once amended) A method comprising:

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making a first determination, based on first feedback generated during execution of a program, the first determination to indicate whether [the] <u>a</u> size of a compiled code cache, which is a memory area to store native code instructions, should be modified;

making a second determination, based on second feedback generated during execution of the program, the second determination to indicate whether [the] a size of a heap, which is a memory area, separate from the compiled code cache, to store data created at runtime but that is not to store code, should be modified; and

based on the first determination and the second determination, modifying a shared storage region, which is to store both the compiled code cache and the heap[.];

wherein said modifying further comprises moving a boundary
between the compiled code cache and the heap while maintaining
the current size of the shared storage area, and to decrease the
size of the heap.

Claim 49. (Once amended) The method of claim [46] 45, wherein:
said modifying further comprises moving the boundary between
the compiled code cache and the heap in order to increase the
size of the heap.

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### REASONS FOR ALLOWANCE

5. The following is an Examiner's Statement of Reasons for Allowance:

The prior arts of record do not teach or suggest, alone or in combination, all the limitations of the independent claims of the current invention (amended claims 1, 19 and 45). discussion of the reasons for allowance shall be directed to claim 1 in which the Examiner shall designate as the primary invention in this application; however, the reasons for allowance will also apply to all other indicated independent claims (claims 19 and 45). The prior arts of record do not teach nor suggest either methods (as being claimed in the amended claims 1 and 45) or article (as being claimed in the amended claim 19) wherein the method comprises making a first determination to indicate whether size of a compiled code cache should be modified based on first feedback generated during execution of a program; making a second determination to indicate whether size of a heap should be modified based on second feedback generated during execution of the program, and modifying a shared storage region based on the first determination and the second determination; wherein modifying the shared storage region based on the first and second determinations further comprises if the second determination

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indicates that the size of the heap should be increased, modifying allocation of the shared storage region to increase the size of the heap, and to decrease the size of the compiled code cache. In light of the foregoing, claims 1, 19 and 45 of the present application are found to be patentable over the prior arts. Claims 2-3, 6-18, 20-21, 24-36, 47-49 and 51-52 further limit the allowable independent claims 1, 19 and 45. These claims are therefore allowable for the same reason as set forth above.

Any comments considered necessary by Applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan V. Thai whose telephone number is (571)-272-4187. The examiner can normally be reached on from 6:30 A.M. to 4:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mathew M. Kim can be reached on (571)-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application

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may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TVT/February 05, 2007

Tuan V. That

PRIMARY EXAMINER

**Group 2100**